Original Research Article

ANALYZING THE PERFORMANCE OF A MULTI PRODUCT PRODUCER COMPANY IN INDIA

Abstract

Farmer producer companies were started with the objective of increasing the income of farmers through aggregation, adoption of improved technologies and access to the service and markets. Ramanathapuram Farmer Producer Company Limited (RFPCL) was started during 2015 and it is a multi product producer company. Financial performance is one of the important criteria for sustainability of the business by the FPCs. Hence this study was proposed with the objective of analyzing the performance of RFPCL. Primary and secondary data were collected for analyzing the performance of RFPCL. Primary data analysis showed that RFPCL established strong forward and backward linkage. The members of the RFPCL benefited in inputs purchase, access to farm machinery, credit, and crop insurance than the non members. Even though the company's operational performance was better, financial performance was poor. Based on the altman Z score model results, the company will bankrupt in the near future. The external borrowing of the company limits the profitability. Hence support from the Government and better financial management will make the company financially sound in the near future.

Key words: Farmer Producer Company, Financial Performance Analysis, Altman Z Score Model.

1. INTRODUCTION

A well-known method for overcoming the difficulties faced by small-scale manufacturers is collective action. Farmers' organisations with various organisational structures, such as cooperatives, associations, unions, groupings, and federations, have been identified as playing a crucial role in improving farmers' access to markets. (Chirwa et al. 2005).

Farmers Producer Organizations (FPOs) were considered as a cutting-edge form of cooperative society in which farmers joining together voluntarily to build a business on the important tenet of membership and sharing a common interest, particularly in the development of technical and economic activities (NABARD, 2015). In India, during 2002 under the chairmanship of economist Y. K. Alagh the concept of Producer Company was evolved by introducing a new part IX A into the Companies Act, 1956 (Alagh, 2007).

Farmer Producer Company is a registered legal entity of primary producers engaged in farms (Manasw 2019). Reduced transaction costs, risk management, social capital development, collective action, and redressing missing markets were the five potential roles that Farmer Producer Company could play in bolstering marketplaces for goods produced, purchased, and sold by smallholders (Torero, 2011).

1.1 FPC in Tamil Nadu

The Tamil Nadu Government has been supporting FPCs since 2014-15. **FPOs** have been promoted through TNSFAC under various schemes like National Agricultural Development Program (NADP), National Mission on Sustainable Agriculture (NMSA), based on the process guidelines of Small Farmers Agri Business Consortium (SFAC), GOI. Besides, Self-promoted FPCs and Farmers Producer Companies promoted by other agencies are also functioning. There are around 500 FPCs registered from the State of Tamil Nadu. Government of Tamil Nadu will continue to support and promote FPCs through various schemes (TNSFAC report 2019).

State and central governments were promoting the FPC as a way to assist farmers. New programmes were launched to develop the FPCs, and provide financial support to the FPCs. Financial performance is one of the important criteria for sustainability of any business. Hence it is important to assess the performance of the FPC's.

1.2 Objectives

To analyze the linkages established by the RFPCL

To assess the benefits of farmer members and

To analyze the financial performance of Ramanathapuram Farmer Producer Company limited (RFPCL).

2. Review of literature

Chauhan (2018) analyzed the financial performance of Farmer Producer Company in south India, she selected six FPCs in south India and found that liquidity position of the FPC and asset utilization was good. She concluded that for sustainability of a company financial performance of the FPC should be in good condition and the financial performance of the sample FPCs were good.

Verma (2019) analyzed that FPOs helping the farmers in various ways and provided more benefits to their members over non members, FPC members earned RS 2000/month more than the non members in the village.

Dhineshwari (2021) did research on performance analyze of FPC in western Tamil Nadu using Altman Z score model. She analyzes 25 FPCs and found that most of the FPCs were in very poor financial condition and they need financial support for their sustainability.

3. Data and Research methodology

The sample for this study was selected from list of FPCs in Tamil Nadu. The variable used for selecting FPCs was number of years in operations, activities performed, and turnover obtained. Ramanathapuram Farmer Producer Company limited (RFPCL) was selected as sample.

RFPCL was first started as a farmers group and registered as FPC at 2015. RFPCL become a FPC and having more than six years of experience with 2000 farmers as members, RFPCL was given best FPC award and had a five core turn over. It is located in the Ramanathapuram district, Kamuthi block, which is dry area and only one season the farming activities are carried out.

This FPC is providing inputs, machinery, crop, credit, and procures the produce from its members. Their main business is buying and selling of the agri and horticulture crops, machinery renting, value addition in pulses, and oil seed crops. Their secondary business is running super market and lending loan to members. This FPC had license for selling seed, fertilizer, plant protection chemicals, trade mark license as Ramnad green agro products. Apart from this it has storage, mobile van; seed processing, grading and packaging facility. Crops covered by RFPCL are paddy, sorghum, chilly, cotton, and black gram.

Primary survey was conducted with sample of 120 rice farmers in the Kamuthi block of the Ramanathapuram district; based on simple random sampling six villages were selected in the Kamuthi block, ten farmers being selected in both member and non-member categories from each village. Structured interview schedule was used to collect the data in general characteristics and services availed by the members from RFPCL. The secondary data was collected from the audit report of the company, form 2016-17 to 2020-21.

3.1 Tools

For the present study unpaired t test, financial ratios and Altman Z score model was used for analysis. Current ratio, return on capital employed, degree of operating leverage, interest coverage ratio, and debt to equity ratio was calculated for the financial data collected.

Table 1 Different financial ratios and altman Z score model, forward and backward linkages meaning

S.N	**Particulars**	**Meaning**
1	Current ratio	It is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year.
2	Return on capital employed	It is a profitability ratio that can be used to assess a company's profitability and capital efficiency.
3	Degree of operating leverage	The degree of operating leverage measures how much a company's operating income changes in response to a change in sales.
4	Interest coverage ratio	It is a debt and profitability ratio used to determine how easily a company can pay interest on its outstanding debt.
5	Debt equity ratio	It is a measure of the degree to which a company is financing its operations through debt versus wholly owned funds
6	Altman Z score model	Altman’s Z-Score model is a numerical measurement that is used to predict the chances of a business going bankrupt. Z score

		< 1.23 = going to bankrupt 1.23to 2.9 = moderate risk of bankruptcy > 2.9 = safe zone
7.	Backward linkage	Backward linkage is the term used in FPCs to describe creating relationships with farmers, input agencies, loan facilitation, etc.
8.	Forward linkage	Forward linkage is the integration of the market through the growth of linkages with wholesalers, processors, retailers, and exporters.

4. Results and discussion

4.1 Linkages established by the RFPCL

Backward linkage

RFPCL offers farmers inputs like seeds, fertilizer, and plant protection chemicals; RFPCL purchased required inputs from input companies and other sellers through dealership. The procured inputs from suppliers were sold through an exclusive input shop established by the FPC. RFPCL provided the inputs for member farmers at a price lower than the market price. The benefit farmers obtained was the reduction in cost by buying inputs from the FPC, reducing the role and cost associated with middle men and transportation.

To make farm operations simpler, farm machinery were available to hire; RFPCL had tractor, cultivator, rotavator, tiller, maize post harvester etc. they are renting the farm machinery at lesser cost than the others.

The farmer members of the organization received credit services in the form of loans and crop loans enabled by banks for their needs in terms of production and subsistence; RFPCL input credit enabled the farmers for timely access to essential inputs which in turn increased the sale of inputs and helped to build up a strong relationship with the input supplier, also provided livestock loan for members; and lower the risk of crop failure members are offered crop insurance service under the Pradhan Mantri Fasal Bima Yojana (PMFBY) scheme.

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Technical advice is the best ways to grow different crops; technical guidance provided were crop production schedule, advisory service on pest and disease control, demonstration of new technologies, information on subsidies associated with crop cultivated. RFPCL provided agricultural training and transferring new technology to its members through agri colleges, agriculture office, NABARD.

Forward linkage

RFPCL selling its products in two ways, Selling produce in big quantities straight to rice processers, agribusiness firm, government agencies without any value addition.

RFPCL procures from farmers, processed it, label it and sold it through their own retail location (super market). They also marketed to other supermarkets using their brand name Ramnad agro products. The value added products are ground nut oil, coconut oil, sunflower oil, gingili oil, and black gram.

Backward linkage **Forward linkage**

Figure 1 Forward and backward linkages in the RFPCL

4.2 Benefits of members

Input service

Paddy is the major crop in the study area. Farmers are giving importance to buying quality inputs for paddy crop. In members 83 percent farmers purchase inputs from RFPCL; the remaining 17 percent members not purchase inputs from FPC because the input shop is far away from the farm land. So this members purchase inputs from local shops 9 percent, having their own inputs 3 percent and agri offices 3 percent as well as from friends and family 2 percent. Selling price of inputs in RFPCL was, rice seed (CO 51) Rs 1500 per 30 kg; urea Rs 350 per 50 kg; DAP Rs 1400 per 50 kg; complex fertilizer Rs 450 per 50 kg; plant protaction chemicals ultra Rs 250 per liter; pseudocon Rs 260 per 500 ml.

Non-member farmers purchased inputs from local stores 46 percent, their own 30 percent, agri offices 16 percent, and friends and family 8 percent. Price of the inputs were paddy seed (CO 51) Rs 1900 per 30 kg; urea Rs 700 per 50 kg; DAP Rs 1650 per 50 kg; complex fertilizer Rs 750 per 50 kg; plant protection chemicals ultra Rs 380 per liter; pseudocon Rs 350 per 500 ml.

Expenditure on inputs for paddy per one acre by member and non members analyzed and the result are presented in table 2.

Table 2: Expenditure on inputs by members and non members (Rs/acre)

S.no	Category	No of respondents	Mean value of expenditure of inputs
1	Member	50	6126
2	Non member	60	7343
		P value	5.22E-25

From table 2 result, based on P value it could be concluded that there exists significant difference in the mean value of expenditure on inputs by member and non member farmers. The members were getting input at cheaper cost than the non members. Members also said they were getting inputs regularly from RFPCL.

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Farm machinery service

In the study area rice farmers are using farm machinery for all farm operations except for weeding. In members 15 percent farmers had their own machinery, while the remaining members 75 percent hiring the farm equipment from RFPCL and from nearby villages 10 percent due to distance. RFPCL renting farm machinery at low price than local villages to benefit members; the renting chargers are tractor with rotavator Rs 900 per hr; tractor with cultivator Rs 700 per hr; power tiller Rs 650 per hour.

Fifteen percent of non-members had their own machines, and the rest 85 percent hiring from nearby villages. Non members hiring farm machineries tractor with rotavator Rs 1200 per hr; tractor with cultivator Rs 1000 per hr; power tiller Rs 900 per hour.

Expenditure on farm machinery by member and non member for one acre of paddy was analyzed. The results are presented in the table 3.

Table 3: Expenditure on farm machinery by members and non members (Rs/acre)

S.NO	Category	No of respondents	Mean value of expenditure on farm machinery
1	Member	45	2600
2	Non member	60	2850
		P value	4.72E-06

From the P value there is a significant difference in the mean value of expenditure on farm machinery by the members and non members. And it could be concluded that members avail farm machinery at lowest cost than non members.

Credit service

Farmers are directly depended on the credit to do farming activities. Members receive credit through RFPCL 67 percent as well as banks 15 percent, cooperative societies 8 percent and friends and family 5 percent and money lenders 5 percent. RFPCL provided crop of loan and livestock loan to its members;

and the loan was up to Rs 30000 with the duration of 18 months. The livestock loan up to Rs 50000 with the 18 months duration. RFPCL also help members to get business loan, home loan and other loans from private and government banks by providing pledge.

Non-members receive credit from banks 39 percent, cooperative societies 35 percent, friends and family 18 percent, and money lenders 8 percent. Non members got Rs 20000 as a crop loan for 12 months and livestock loan 45000 with the duration of 22 months.

Credit amount availed by member and non member, for one year was analyzed and the results are presented in table 4.

Table 4: Credit availed by the member and non member (Rs/ year)

S.NO	Category	No of respondents	Mean value credited amount	Interest (%)
1	Member	40	39500	22
2	Non member	60	30833.33	18
		P value	2.22E-05	

Based on P value there is a significant difference between mean value of loan amount sanctioned to member and non member farmers. It demonstrates that the member farmers getting higher loan amount (39500) than the non members because members had loan from both FPC and banks. Non members were facing problems in getting loan from banks like tedious process. Members can avail loan in RFPCL and bank at a time. Farmer members said they have no trouble in acquiring loans through RFPCL and there is no need of collateral.

Members were offered crop insurance in the RFPCL; non members were doing crop insurance at computer center. The premium amount for one acre paddy was same in the FPC and computer center but the service charge varies. In RFPCL 100 rupees per time and in computer centers service charge is based on acre; for one acre the service charge is 200 rupees per acre.

Selling price of paddy

Farmers are facing problems in marketing their produce. FPC was buying the produce from farmers and marketing it. Eighty seven percent Members sell their goods to RFPCL, eight percent to retailers, five percent to wholesalers

Eighty percent of non-members sell to retailers and to wholesalers 20 percent. To see whether there is a difference between selling price of farmers, selling price of per kg paddy by both member and non member was analyzed. And the results are presented in table 5.

Table 5: Selling price of paddy by member and non member (Rs/kg)

S.NO	Category	No of respondents	Mean value of selling price
1	Member	52	19
2	Non member	60	16
		P value	1.21E-15

From table 6 result, based on P value there is significant difference between mean value of selling piece of per kg paddy by both farmers. It could be concluded that RFPCL procuring per kg of paddy at an average price of 19 rupees; it is three rupees higher than the non member selling price. FPC has a greater purchase price than the competitors. Members said that RFPCL procures products at a higher price than others.

Agriculture training

There were constant advancements in agriculture. RFPCL transfer advisory service to it s members. Members are getting agricultural information from RFPCL 84 percent, the agri office 11 percent, friends, and family 5 percent. Non-members receive their information from the agricultural office 48 percent, friends and family 10 percent, and nobody else 42 percent.

Number of agricultural training attended by member and non member were analyzed and the results are presented in table 6.

Table 6: Number of agricultural training attended by member and non members

S.NO	Category	No of respondents	Mean value of number of trainings attended
1	Member	60	7.18
2	Non member	60	2.01
		P value	1.11E-24

According to P value, the mean value of the number of training sessions attended by members and non-members differs significantly. An average RFPCL member attended seven agricultural training sessions, and non members only two it indicating that FPC is assisting farmers in expanding their agricultural knowledge. Members said they attended more number of agricultural training through RFPCL.

4.3 Financial performance

The collected data was analyzed using ratios and altman z score model. Financial ratios from 2016-21 was calculated and the results are presented in the Table 7.

Table: 7 Financial ratios of RFPCL from 2016-2020

S.N	**Year**	**Current Ratio**	**Return On Capital Employed**	**Degree Of Operating Leverage**	**Interest Coverage Ratio**	**Debt to Equity ratio**
1	**2016-2017**	**1.5**	**13**	**0**	**3**	**2.34**

2	**2017-2018**	**6.1**	**14**	**22.6**	**1.5**	**10.44**
3	**2018-2019**	**--***	**22**	**-1.6**	**1.08**	**10.68**
4	**2019-2020**	**2.6**	**20**	**-0.02**	**1.05**	**8.66**
5	**2020-2021**	**0.8**	**16**	**0.5**	**1.04**	**10.64**

*(current liabilities are extremely very low on that year)

Current ratio

Ideal liquidity ratio for any company is 2:1. The RPCL had more than ideal ratio in all the years except in 2021. It indicated that RPCL had the ability to pay their short term liabilities and expenses with the current assets available. In 2021, the ratio was less than one indicated poor liquidity, the company struggled to pay the current liability. The current liability is increased from 37 lakes to one core in the year 2021. RFPCL borrowed loan from private banks to provide loan to its members.

Return on capital employed

This ratio shows that the company is utilizing its capital in effective manner, particularly in the year of 2018-19. In all the years, the ratio was more than 10 percentages indicating better return for the capital employed. The average return on capital employed is 17 percentages which is a good measure. All the year capital employed was more than three cores except first year. This company had higher value of inventories not other investments..

Degree of operating leverage

In 2017-18 DOL were 22.6, it was indicated good revenue but it went negative in the year 2018-2019 and 2019-2020; for the last year (2020-2021) it was positive. In every year there was difference in sales, for the 2019-2020 year percentage change in sales was 1026 but next year 2020-2021 it was -35.9. This company sale was not constant. Percentage change in EBIT was decreasing year by year, for the last year it was -18.4.

Generally, a low DOL indicates that the company's variable costs are larger than its fixed costs. That implies that a significant increase in the company's sales will not lead to a substantial increase in its operating income.

Interest coverage ratio

It is decreasing year by year. The lower the interest coverage ratio, the greater the company's debt and the possibility of bankruptcy, for the last year 2020-21 the ratio is 1.04, for all the years EBIT and interest paid by the RFPCL is almost same, both are in more than 60 lacks, it shows that RFPCL is suffering by long term debt.

Debt to equity ratio

The debt to equity ratio should be between 0.5 and 1.5; lower is often better. RFPCL had higher than 0.5. A debt ratio of 10 could mean RFPCL is in poor standing and suffering to pay back any accumulated debt. Equity of this company was ten times lesser than the dept. it had more than four cores as it long term debt.

4.3.1 Results of altman z score model

The altman Z score was calculated to assess the financial soundness of the selected FPC. .The results are presented in Table 8. Altman’s Z-score values, is lower than 1.23, it means that the company is in financial distress and with a high probability of going bankrupt. On the other hand, a score of 2.9 and above means that the company is in a safe zone and is unlikely to file for bankruptcy. A score of 1.23 to 2.90 indicates that the company is in the grey region and has a moderate risk of bankruptcy (Edward Altman 1968)

Table: 8 Altman z score value of RFPCL during year 2016-2021

S.NO	**YEAR**	**Z SCORE**
1	**2016-17**	**0.677**
2	**2017-18**	**0.569**
3	**2018-19**	**0.953**
4	**2019-20**	**1.085**

5	**2020-21**	**0.565**

The majority of the samples Farmer Producer Companies are in distress zone and if the present circumstance proceeded, these organizations will be bankrupt, within next two years and all of the companies have negative sustainable growth rate, indicating that they would be unable to operate without external funding. As a result, there is an urgent need to concentrate on these companies in order to ensure their sustainable growth.(Dhineshwari S 2021)

Based on the altman z score it could be inferred that, RFPCL is in a critical position in terms of financial stability. In all the selected years, Z score was less than 1.23; the company had poor financial stability. There is a chance to RFPCL for bankrupt within next two years.

4 Suggestions

FPC plays a major role in increasing the farmer's income as it helps the farmers from buying of seed to selling of the product. Some research proved that FPCs are boon to farmers, and governments also promoting the FPC, but many FPCs were unable to survive for long term.

Working FPCs are suffering in terms of getting enough capital for carryout the activities and sustaining the activities for long term.

RFPCL had perfect forward and backward linkages, and as a result, they are connected with farmers and other stakeholders. The members of the RFPCL benefited in inputs, access to farm machinery, credit, and crop insurance and getting agricultural training, and higher selling price for their products than the non members.

RFPCL had a good, return on capital employed but poor in current ratio, interest coverage ratio, degree of operating leverage, and debt to equity ratio. RFPCL needs external lending support to overcome their financial problems. Government banks should provide loans to the FPC at lesser interest which will support the FPCs to servive.

Based on Altman Z score this FPC has higher chance of bankruptcy near future. Financial performance and soundness of the FPC's are important criteria for the sustainability of the company. Hence efforts to be made to increase the profitability and sustain the performance in the near future

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